

AMENDMENTS TO THE DRAWINGS

Please replace the drawing sheet containing Figs. 1 and 2 with the attached Replacement Sheet amending Fig. 1 to include the legend "Prior Art".

REMARKS

Claims 1-23 and 26 are pending in this application. Claims 1, 15 and 17 are the independent claims. Claims 15, 16 and 26 are allowed. By this Amendment, claims 1, 5, 6, 10, 11 and 17 are amended. No new matter is added.

Drawing Objection

Figure 1 objected to for failing to include the legend "Prior Art". As Fig. 1 is amended to include the legend, withdrawal of the objection is respectfully requested.

Claim Rejection under 35 USC §112

Claim 10 is rejected under 35 U.S.C. §112, 2nd paragraph, for allegedly being indefinite due to recitation of the term "preferably". As claim 10 is amended to delete the term, withdrawal of the rejection is respectfully requested. Further, although not rejected, claims 5, 6 and 11 are also amended to remove the phrase "preferably".

Allowed/Allowable Subject Matter

Claims 15, 16 and 26 are allowed and claims 5-7, 11-13 and 18-23 are indicated as being allowable if rewritten in independent form. Claims 5-7, 11-13 and 18-23, as well as the rejected claims, are in condition for the reasons discussed below.

Rejections Under 35 USC §102

Claims 1-4, 8-10, 14, 15 and 17 stand rejected under 35 U.S.C. §102(b) as being anticipated by US Patent 5,891,505 to Schuman et al. (Schuman). The rejection is respectfully traversed.

Schuman relates to a method for pressure processing a pumpable food substance. In Schuman, the pumpable food substance such as soup, jam or fruit juice, is transferred through a first valve 12 into a bladder 15 disposed in a chamber 44 of a pressure vessel 30. Upon transport of the food substance into the bladder, the valve front 12 is moved from a first position that enables transport of the food substance through the inlet 24 to a second position which blocks the passageway 28. An ultra-high pressure fluid is then pumped through a port 76 to transport the ultra-high pressure fluid to a second region 52 in the chamber 44 of the pressure vessel 30. The second region 52 is isolated from the pumpable food substance by the bladder 15.

The ultra-high pressure fluid is used to pressure process the food substance to kill microorganisms.

Pressures in the range of 40,000-130,000 psi (2,758-8,964 bar) may be used to process (e.g. pasteurize) the food product (see col. 3, lines 38-53). Thus, in Schuman, the food substance is pumped into the bladder at approximately atmospheric pressure and once the passageway 28 is closed, so that the food substance cannot escape the bladder, the ultra-high pressure fluid is pumped into the second region 52 to increase the pressure for pasteurization of the food product.

Accordingly, Schuman fails to disclose changing the pressure in the pressure vessel from one of said two pressure states to an intermediate pressure state substantially above atmospheric pressure and transferring liquid pressure medium between a second pressure changing device and the pressure vessel, thereby changing the pressure in the pressure vessel from said intermediate pressure state to the other of said two pressure states. In other words, Schuman merely discloses the bladder 15 with the food product and then increasing the pressure via the ultra-high pressure fluid without achieving an intermediate pressure as recited in the rejected claims. In fact Schuman is silent regarding an increase of pressure of the food substance prior to the application of the ultra-high pressure fluid.

Regarding the rejection of dependent claim 8, Schuman fails to disclose withdrawing part of the liquid pressure medium from the pressure vessel to the first pressure changing device (i.e. the liquid food substance to the first valve 12) so that the pressure vessel is lower to the intermediate pressure and releasing the rest of the liquid pressure medium from the pressure vessel to the second pressure changing device so that the pressure vessel is decreased from the intermediate to the low pressure. Rather, Schuman discloses drawing off the ultra-high pressure liquid prior to withdrawing the food substance from the pressure vessel.

Regarding dependent claim 9, Schuman fails to disclose that the step of releasing is followed by or performed simultaneously by a step of feeding the withdrawn part of the liquid pressure medium from the first pressure changing device via the pressure vessel to the second pressure changing device. Rather, as clearly described in Schuman, the food substance in the bladder passes back out of the first valve 12 and never passes through the second pressure changing device as alleged in the Office Action.

Regarding the rejection of claim 14, there is no disclosure in Schuman of an intermediate pressure in the order of 2000 bar to 85% of the pressure at the high pressure state, nor does the Office Action provide any support for the rejection.

As Schuman fails to disclose each and every feature recited in the rejected claims, withdrawal of the rejection is respectfully requested.

CONCLUSION

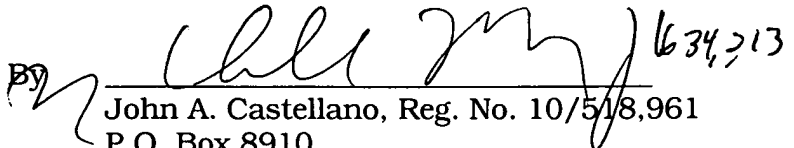
In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano, Reg. No. , at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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